

IN THE CLAIMS:

This is a complete listing of the claims.

1. (Original) A pharmaceutical composition comprising one or more peptides selected from the group consisting of:

- a) a peptide having the sequence of any of SEQ ID NO:1 to SEQ ID NO:36;
- b) a peptide homologous to any one of SEQ ID NO:1 to SEQ ID NO:36 from another flavivirus; and
- c) a peptide functionally equivalent to any one of SEQ ID NO:1 to SEQ ID NO:36, wherein the functionally equivalent peptide is identical to at least one of SEQ ID NO:1 to SEQ ID NO:36 except that one or more amino acid residues has been substituted with a homologous amino acid, resulting in a functionally silent change, or one or more amino acids has been deleted.

2. **(Currently Amended)** A pharmaceutical composition comprising at least one peptide selected from the one or more of the following:

- a) a peptide having the amino acid sequence one or more of SEQ ID NO:1 to SEQ ID NO:36, wherein the N-terminal "Xaa" is amino acid residue comprises an N-terminal amino group and the C-terminal "Xaa" is amino acid residue comprises a c-terminal carboxyl group;
- b) a peptide having the sequence of any of SEQ ID NO:1 to SEQ ID NO:36, wherein the chemical moiety at the peptide's N-terminus ~~N-terminal~~ "Xaa" is not an amino group and/or the chemical moiety at the peptide's C-terminus ~~C-terminal~~ "Xaa" is not a carboxyl group, wherein the N-terminal "Xaa" chemical moiety is selected from the group consisting of: an acetyl group, a hydrophobic group, carbobenzoxyl group, dansyl group, a t-butyloxycarbonyl group, or a macromolecular carrier group, and/or wherein the C-terminal "Xaa" chemical moiety is selected from the group consisting of an amido group, a hydrophobic group, t-butyloxycarbonyl group or a macromolecular group;
- c) a peptide having the sequence of any of SEQ ID NO:1 to SEQ ID NO:36, wherein at least one bond linking adjacent amino acid residues is a non-peptide bond;

- d) a peptide having the sequence of any of SEQ ID NO:1 to SEQ ID NO:36, wherein at least one amino acid residue is in the D-isomer configuration;
- e) a peptide as in part "a)" or "b)" except that at least one amino acid has been substituted for by a different amino acid; or
- f) a functional fragment of a peptide as set out in any of parts "a)" to "e)", having at least 3 contiguous nucleotides of any one of SEQ ID NO:1 to SEQ ID NO:36.

3. (Original) The composition of claim 2 wherein the peptide is selected from one or more of the group consisting of SEQ ID NO:1, 2, 3, and 4.

4. **(Currently Amended)** The composition of claim 3 wherein the N-terminal "~~Xaa~~" chemical moiety is an acetyl group, a hydrophobic group a carbobenzoxy group, a dansyl group, a t-butyloxycarbonyl group, or a macromolecular carrier group; and/or the C-terminal "~~Xaa~~" chemical moiety is a hydrophobic group, a t-butyloxycarbonyl group or a macromolecular group.

5. **(Currently Amended)** The composition of claim 3 wherein the N-terminal "~~Xaa~~" chemical moiety is a macromolecular carrier group selected from a lipid conjugate, polyethylene glycol, or a carbohydrate; and/or the C-terminal "~~Xaa~~" chemical moiety is a macromolecular carrier group selected from a lipid conjugate, polyethylene glycol, or a carbohydrate.

6. **(Currently Amended)** The composition of claim 3 wherein at least one bond linking adjacent amino acid residues in the peptide is a non-peptide bond selected from the group consisting of an imido bond, an ester bond, a hydrazine bond, a semicarbazide bond and an azo bond.

7. (Original) The composition of 3 wherein at least one amino acid is a D-isomer amino acid.

8. **(Currently Amended)** The composition of claim 3 wherein N-terminal "~~Xaa~~" chemical moiety is an amino group and the C-terminal "~~Xaa~~" chemical moiety is a carboxyl group.

9. (Original) The composition of claim 2 wherein the peptide is selected from one or more of the group consisting of SEQ ID NO:5, 13, 21, and 29.

10. **(Currently Amended)** The composition of claim 9 wherein the N-terminal "~~Xaa~~" chemical moiety is an acetyl group, a hydrophobic group a carbobenzoxy group, a dansyl group, a t-butyloxycarbonyl group, or a macromolecular carrier group; and/or the C-terminal "~~Xaa~~" chemical moiety is a hydrophobic group, a t-butyloxycarbonyl group or a macromolecular group.

11. **(Currently Amended)** The composition of claim 9 wherein the N-terminal "~~Xaa~~" chemical moiety is a macromolecular carrier group selected from a lipid conjugate, polyethylene glycol, or a carbohydrate; and/or the C-terminal "~~Xaa~~" chemical moiety is a macromolecular carrier group selected from a lipid conjugate, polyethylene glycol, or a carbohydrate.

12. **(Currently Amended)** The composition of claim 9 wherein at least one bond linking adjacent amino acid residues in the peptide is a non-peptide bond selected from the group consisting of an imido bond, an ester bond, a hydrazine bond, a semicarbazide bond and an azo bond.

13. (Original) The composition of claim 9 wherein at least one amino acid is a D-isomer amino acid.

14. **(Currently Amended)** The composition of claim 9 wherein the N-terminal "~~Xaa~~" chemical moiety is an amino group and the C-terminal "~~Xaa~~" chemical moiety is a carboxyl group.

15. (Original) The composition of claim 2 wherein the peptide is selected from one or more of the group consisting of SEQ ID NO:6-9, 14-17, 22-25, and 30-33.

16. **(Currently Amended)** The composition of claim 15 wherein the N-terminal "~~Xaa~~" chemical moiety is an acetyl group, a hydrophobic group a carbobenzoxy group, a dansyl group, a t-butyloxycarbonyl group, or a macromolecular carrier group; and/or the C-terminal "~~Xaa~~" chemical moiety is a hydrophobic group, a t-butyloxycarbonyl group or a macromolecular group.

17. **(Currently Amended)** The composition of claim 15 wherein the N-terminal "~~Xaa~~" chemical moiety is a macromolecular carrier group selected from a lipid conjugate, polyethylene glycol, or a carbohydrate; and/or the C-terminal "~~Xaa~~" chemical moiety is a macromolecular carrier group selected from a lipid conjugate, polyethylene glycol, or a carbohydrate.

18. **(Currently Amended)** The composition of claim 15 wherein at least one bond linking adjacent amino acid residues in the peptide is a non-peptide bond selected from the group consisting of an imido bond, an ester bond, a hydrazine bond, a semicarbazoid bond and an azo bond.
19. (Original) The composition of claim 15 wherein at least one amino acid is a D-isomer amino acid.
20. **(Currently Amended)** The composition of claim 15 wherein the N-terminal "~~Xaa~~" chemical moiety is an amino group and the C-terminal "~~Xaa~~" chemical moiety is a carboxyl group.
21. (Original) The composition of claim 2 wherein the peptide is selected from one or more of the group consisting of SEQ ID NO:10-12, 18-20, 26-28, and 34-36.
22. **(Currently Amended)** The composition of claim 21 wherein the N-terminal "~~Xaa~~" chemical moiety is an acetyl group, a hydrophobic group, a carbobenzoxy group, a dansyl group, a t-butyloxycarbonyl group, or a macromolecular carrier group; and/or the C-terminal "~~Xaa~~" chemical moiety is a hydrophobic group, a t-butyloxycarbonyl group or a macromolecular group.
23. **(Currently Amended)** The composition of claim 21 wherein the N-terminal "~~Xaa~~" chemical moiety is a macromolecular carrier group selected from a lipid conjugate, polyethylene glycol, or a carbohydrate; and/or the C-terminal "~~Xaa~~" chemical moiety is a macromolecular carrier group selected from a lipid conjugate, polyethylene glycol, or a carbohydrate.
24. **(Currently Amended)** The composition of claim 21 wherein at least one bond linking adjacent amino acid residues in the peptide is a non-peptide bond selected from the group consisting of an imido bond, an ester bond, a hydrazine bond, a semicarbazoid bond and an azo bond.
25. (Original) The composition of claim 21 wherein at least one amino acid is a D-isomer amino acid.

26. **(Currently Amended)** The composition of claim 21 wherein the N-terminal "Xaa" chemical moiety is an amino group and the C-terminal "Xaa" chemical moiety is a carboxyl group.
27. (Original) A method of treating or preventing a Flavivirus infection comprising administering to the patient an effective amount of a pharmaceutical composition according to claim 1.
28. (Original) A method of treating or preventing a Flavivirus infection comprising administering to the patient an effective amount of a pharmaceutical composition according to claim 2.
29. (Original) A substantially purified antibody specific for a peptide as described in claim 1.
30. **(Currently amended)** A substantially purified antibody specific for a peptide as described in claim 2 ~~claim 0~~.

IN THE SPECIFICATION:

I. Please amend paragraphs [0001] and [0010] as follows:

[0001] This application ~~Application claims Benefit of United States Provisional Application serial number 60/424,746, filed November 8, 2002~~ is a §371 U.S. national stage filing of international application PCT/US2003/035666, filed 7 November 2003 (published in English on 27 May 2004 as WO 2004/044220) and claiming priority to US 60/424,746 filed 8 November 2002, each of which is incorporated by reference, in its entirety.

[0010] Various aspects of this embodiment of the invention provide for compositions that comprise one or more peptides selected from the following.

A) Peptides having the amino acid sequence one or more of SEQ ID NO:1 to SEQ ID NO:36, wherein the N-terminal “Xaa” chemical moiety (also referred to as “X”, below) is an amino group and the C-terminal “Xaa” chemical moiety (also referred to as “Z”, below) is a carboxyl group.

B) Peptides having the sequence of any of SEQ ID NO:1 to SEQ ID NO:36, wherein the N-terminal “Xaa” chemical moiety is not an amino group and/or the C-terminal “Xaa” chemical moiety is not a carboxyl group, wherein the N-terminal “Xaa” chemical moiety is selected from the group consisting of: an acetyl group, a hydrophobic group, carbobenzoxy group, dansyl group, a t-butyloxycarbonyl group, or a macromolecular carrier group, and/or wherein the C-terminal “Xaa” chemical moiety is selected from the group consisting of an amido group, a hydrophobic group, t-butyloxycarbonyl group or a macromolecular group.

C) Peptides having the sequence of any of SEQ ID NO:1 to SEQ ID NO:36 except that at least one bond linking adjacent amino acid residues is a non-peptide bond.

D) Peptides having the sequence of any of SEQ ID NO:1 to SEQ ID NO:36, except that at least one amino acid residue is in the D-isomer configuration.

E) Peptides as in groups “A)” or “B)” except that at least one amino acid has been substituted for by a different amino acid (whether a conservative or non-conservative change).

F) Peptides that are a functional fragment of a peptide as set out in any of groups "A)" to "E)", above, where the peptides have at least 3 contiguous nucleotides of any one of SEQ ID NO:1 to SEQ ID NO:36.

II. Please replace the original sequence listing with the substitute sequence listing submitted herewith.